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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/537,959	06/07/2005	Shigeru Tanaka	81844.0036	1391

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HOGAN & HARTSON L.L.P.
1999 AVENUE OF THE STARS
SUITE 1400
LOS ANGELES, CA 90067

EXAMINER

LISTVOYB, GREGORY

ART UNIT	PAPER NUMBER
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1796

NOTIFICATION DATE	DELIVERY MODE
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11/23/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ctkeyner@hhlaw.com
LAUSPTO@hhlaw.com
lbrivero@hhlaw.com

Office Action Summary	Application No. 10/537,959	Applicant(s) TANAKA ET AL.	
	Examiner GREGORY LISTVOYB	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12-14 rejected under 35 U.S.C. 103(a) as being unpatentable over Ohno et al (US 4806422).

Ohno teaches a thermal transfer film comprising a base film and polyimide stick-preventing film having roughness within the range of 0.03-0.15 μm , preferably 0.04-0.08 μm at 80 μm cut off (see Column 3, line 25).

Regarding claim 13, Ohno teaches that one of the possible materials for the above film is polyimide (see column 5, line 50).

In reference to claim 14, Ohno teaches the above composition on a glass surface, which can be considered a laminate (see Column 2, line 45).

Note that cut-off value claimed (0.002 mm, which equal to 2 μm) is different from one of Ohno (80 μm). The position is taken that cut-off value is related to the measurement standard procedure used. For instance, Ohno uses Standard Procedure

Art Unit: 1796

JIS B-0601 (see Column 10, line 15), whereas Applicant uses New View 5030 System with filter low woven 0.002 mm (see line 0205 and line 0210 of the Application).

In addition, Ohno teaches that film thickness of the stick-preventing film is within the range of 2-12 μm (see Column 4, line 5). Therefore, cut-off values within 0.002 mm, since this value is comparable with film thickness.

Ohno does not teach Ra_1/Ra_2 ratio of 0.4 to 1.

According to applicant, the Ra_2 value indicates irregularity with wavelengths of 100 μm or less.

Ohno teaches that film thickness of the stick-preventing film is within the range of 2-12 μm . Therefore, R_2 value is expected to be within the claimed values.

Claim 15 rejected under 35 U.S.C. 103(a) as being unpatentable over Ohno et al (US 4806422) in view of Kitel et al (US 6461722).

Ohno teaches a thermal transfer film comprising a base film and polyimide stick-preventing film having roughness within the range of 0.03-0.15 μm , preferably 0.04-0.08 μm at 80 μm cut off (see Column 3, line 25).

Ohno does not teach a laminate, comprising resin film and a metal.

Kitel teaches a thermal transfer laminate, comprising both polymeric and metal layers (see Abstract).

Therefore, the above composition is art-recognized one for intended purposes.

The selection of a known material based on its suitability for its intended use supported a *prima facie* obviousness determination in *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 65 USPQ 297 (1945) , 325 U.S. at 335, 65 USPQ at 301, see also *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960), *Ryco, Inc. v. Ag-Bag Corp.*, 857 F.2d 1418, 8 USPQ2d 1323 (Fed. Cir. 1988) and MPEP 2144.07.

Therefore, it would have been obvious to a person of ordinary skills in the art to use Ohno's composition as a part of resin/metal laminate in thermal transfer compositions, since the laminate has art recognized suitability for intended purposes.

Claims 12-15 rejected under 35 U.S.C. 103(a) as being unpatentable over Rokugawa et al (US 2001/0013425).

Rokugawa teaches a metal/polyimide film laminate having a surface shape formed on at least one of the surfaces, the surface shape having a Ra1 value of arithmetic mean roughness of 0.1 um or smaller, whereas metal (copper) surface has an average surface roughness of 0.1 um or smaller (see lines 0078 and 0106).

Rokugawa does not teach that laminate roughness created by the special treatment (etching) of the resin film. Instead, he teaches that the metal surface undergoes the above treatment. The position is taken that polyimide film repeats the roughness of the adjacent metal surface in the process of laminate producing. Therefore, the final properties of the laminate are equivalent regardless whether the roughness is created with metal or film surface.

"Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process" *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). See Also *In re Fessmann*, 489 F.2d 742, 744, 180 USPQ 324, 326 (CCPA 1974), *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983), *In re Brown*, 459 F.2d 531, 535, 173 USPQ 685, 688 (CCPA 1972).

Regarding the limitation of measured with a cutoff value of 0.002 mm, and a Ra1/Ra2 ratio of 0.4 to 1, Ra2 being a value measured with a cutoff value of 0.1 mm, the position is taken that Rokugawa teaches thin films (microns). Cut off values claimed are

Art Unit: 1796

comparable with thickness of the film. Therefore, this limitation is achieved in Rokugawa's laminate with great expectation of success.

Claims 12, 14-15 rejected under 35 U.S.C. 103(a) as being unpatentable over Shibuya et al (US 2002/0054991).

Shibuya teaches a polymeric film having a surface shape formed on at least one of the surfaces, the surface shape having a Ra1 value of arithmetic mean roughness of 0.3-1.5 μm (see line 0039).

Regarding the limitation of measured with a cutoff value of 0.002 mm, and a Ra1/Ra2 ratio of 0.4 to 1, Ra2 being a value measured with a cutoff value of 0.1 mm, the position is taken that Shibuya teaches thin films (microns).

Cut off values claimed are comparable with thickness of the film. Therefore, this limitation is achieved in Shibuya's laminate with great expectation of success.

Response to Arguments

Applicant's arguments filed 7/15/2009 have been fully considered but they are not persuasive.

Applicant argues that the focus of Ohno is to achieve as flat surface as possible.

Art Unit: 1796

However, in fact, Ohno discloses stick-preventing layer surface with controlled roughness (see Column 2, line 20), Where at roughness of less than 0.03 mm the film is poor in slipperiness (see Column 2, line 35).

Applicant argues that Ohno does not teach Ra1/Ra2 ratio of 0.4 to 1.

According to Applicant, the Ra2 value indicates irregularity with wavelengths of 100 μm or less. Ohno teaches that film thickness of the stick-preventing film is within the range of 2-12 μm . Therefore, R2 value is expected to be within the claimed values.

Applicant argues that Rokugawa and Shibuya do not teach Ra1/Ra2 ratio and cut-off values.

Regarding the limitation of measured with a cutoff value of 0.002 mm, and a Ra1/Ra2 ratio of 0.4 to 1, Ra2 being a value measured with a cutoff value of 0.1 mm, the position is taken that Rokugawa teaches thin films (microns). Cut off values claimed are comparable with thickness of the film. Therefore, this limitation is achieved in Rokugawa's laminate with great expectation of success.

The same explanation is applicable to Shibuya.

Applicant does not present any arguments regarding Kitel.

Due to amendment of claim 12, rejection under 35 USC 112(1) is withdrawn.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GREGORY LISTVOYB whose telephone number is (571)272-6105. The examiner can normally be reached on 10am-7pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1796

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James J. Seidleck/

Supervisory Patent Examiner, Art Unit 1796

GL